

- 1 1. An isolated nucleic acid molecule selected from
- 2 the group consisting of:
- 3 a) a nucleic acid molecule comprising a nucleotide
- 4 sequence which is at least 55% identical to the nucleotide
- 5 sequence of SEQ ID NO:7 or SEQ ID NO:9, the cDNA insert of
- 6 the plasmid deposited with ATCC as Accession Number _____,
- 7 or a complement thereof;
- 8 b) a nucleic acid molecule comprising a nucleotide
- 9 sequence which is at least 55% identical to the nucleotide
- 10 sequence of SEQ ID NO:25 or SEQ ID NO:27, the cDNA insert of
- 11 the plasmid deposited with ATCC as Accession Number _____,
- 12 or a complement thereof;
- 13 c) a nucleic acid molecule comprising a fragment of
- 14 at least 300 nucleotides of the nucleotide sequence of SEQ
- 15 ID NO:7 or SEQ ID NO:9, the cDNA insert of the plasmid
- 16 deposited with ATCC as Accession Number _____, or a
- 17 complement thereof;
- 18 d) a nucleic acid molecule comprising a fragment of
- 19 at least 300 nucleotides of the nucleotide sequence of SEQ
- 20 ID NO:25 or SEQ ID NO:27, the cDNA insert of the plasmid
- 21 deposited with ATCC as Accession Number _____, or a
- 22 complement thereof;
- 23 e) nucleic acid molecule which encodes a polypeptide
- 24 comprising the amino acid sequence of SEQ ID NO:8 or an
- 25 amino acid sequence encoded by the cDNA insert of the
- 26 plasmid deposited with ATCC as Accession Number _____;
- 27 f) nucleic acid molecule which encodes a polypeptide
- 28 comprising the amino acid sequence of SEQ ID NO:26 or an
- 29 amino acid sequence encoded by the cDNA insert of the
- 30 plasmid deposited with ATCC as Accession Number _____;
- 31 g) a nucleic acid molecule which encodes a fragment
- 32 of a polypeptide comprising the amino acid sequence of SEQ
- 33 ID NO:8, wherein the fragment comprises at least 15
- 34 contiguous amino acids of SEQ ID NO:8 or the polypeptide

1 encoded by the cDNA insert of the plasmid deposited with
2 ATCC as Accession Number _____; and

3 h) a nucleic acid molecule which encodes a fragment
4 of a polypeptide comprising the amino acid sequence of SEQ
5 ID NO:26, wherein the fragment comprises at least 15
6 contiguous amino acids of SEQ ID NO:26 or the polypeptide
7 encoded by the cDNA insert of the plasmid deposited with
8 ATCC as Accession Number _____; and

9 i) a nucleic acid molecule which encodes a naturally
10 occurring allelic variant of a polypeptide comprising the
11 amino acid sequence of SEQ ID NO:8 or an amino acid sequence
12 encoded by the cDNA insert of the plasmid deposited with
13 ATCC as Accession Number _____, wherein the nucleic acid
14 molecule hybridizes to a nucleic acid molecule comprising
15 SEQ ID NO:7 or SEQ ID NO:9 under stringent conditions.

16 j) a nucleic acid molecule which encodes a naturally
17 occurring allelic variant of a polypeptide comprising the
18 amino acid sequence of SEQ ID NO:26 or an amino acid
19 sequence encoded by the cDNA insert of the plasmid deposited
20 with ATCC as Accession Number _____, wherein the nucleic
21 acid molecule hybridizes to a nucleic acid molecule
22 comprising SEQ ID NO:25 or SEQ ID NO:27 under stringent
23 conditions.

1 2. The isolated nucleic acid molecule of claim 1,
2 which is selected from the group consisting of:

3 a) a nucleic acid comprising the nucleotide sequence
4 of SEQ ID NO:7 or SEQ ID NO:9, or the cDNA insert of the
5 plasmid deposited with ATCC as Accession Number _____, or
6 a complement thereof; and

7 b) a nucleic acid comprising the nucleotide sequence
8 of SEQ ID NO:25 or SEQ ID NO:27, or the cDNA insert of the
9 plasmid deposited with ATCC as Accession Number _____, or
10 a complement thereof; and

11 c) a nucleic acid molecule which encodes a
12 polypeptide comprising the amino acid sequence of SEQ ID
13 NO:8 or an amino acid sequence encoded by the cDNA insert of
14 the plasmid deposited with ATCC as Accession Number
15 ____.

16 d) a nucleic acid molecule which encodes a
17 polypeptide comprising the amino acid sequence of SEQ ID
18 NO:26 or an amino acid sequence encoded by the cDNA insert
19 of the plasmid deposited with ATCC as Accession Number
20 _____.

1 3. The nucleic acid molecule of claim 1 further
2 comprising vector nucleic acid sequences.

1 4. The nucleic acid molecule of claim 1 further
2 comprising nucleic acid sequences encoding a heterologous
3 polypeptide.

1 5. A host cell which contains the nucleic acid
2 molecule of claim 1.

1 6. The host cell of claim 4 which is a mammalian host
2 cell.

1 7. A non-human mammalian host cell containing the
2 nucleic acid molecule of claim 1.

1 8. An isolated polypeptide selected from the group
2 consisting of:

3 a) a fragment of a polypeptide comprising the amino
4 acid sequence of SEQ ID NO:8, wherein the fragment comprises
5 at least 15 contiguous amino acids of SEQ ID NO:8.

6 b) a fragment of a polypeptide comprising the amino
7 acid sequence of SEQ ID NO:26, wherein the fragment

8 comprises at least 15 contiguous amino acids of SEQ ID
9 NO:26.

10 c) a naturally occurring allelic variant of a
11 polypeptide comprising the amino acid sequence of SEQ ID
12 NO:8 or an amino acid sequence encoded by the cDNA insert of
13 the plasmid deposited with ATCC as Accession Number
14 __, wherein the polypeptide is encoded by a nucleic acid
15 molecule which hybridizes to a nucleic acid molecule
16 comprising SEQ ID NO:7 or SEQ ID NO:9 under stringent
17 conditions;

18 d) a naturally occurring allelic variant of a
19 polypeptide comprising the amino acid sequence of SEQ ID
20 NO:26 or an amino acid sequence encoded by the cDNA insert
21 of the plasmid deposited with ATCC as Accession Number
22 ____, wherein the polypeptide is encoded by a nucleic acid
23 molecule which hybridizes to a nucleic acid molecule
24 comprising SEQ ID NO:25 or SEQ ID NO:27 under stringent
25 conditions;

26 e) a polypeptide which is encoded by a nucleic acid
27 molecule comprising a nucleotide sequence which is at least
28 55% identical to a nucleic acid comprising the nucleotide
29 sequence of SEQ ID NO:7 or SEQ ID NO:9.

30 f) a polypeptide which is encoded by a nucleic acid
31 molecule comprising a nucleotide sequence which is at least
32 55% identical to a nucleic acid comprising the nucleotide
33 sequence of SEQ ID NO:25 or SEQ ID NO:27.

1 9. The isolated polypeptide of claim 8 comprising the
2 amino acid sequence of SEQ ID NO:8 or SEQ ID NO:26 or an
3 amino acid sequence encoded by the cDNA insert of the
4 plasmid deposited with ATCC as Accession Number
5 or an amino acid sequence encoded by the cDNA insert of the
6 plasmid deposited with ATCC as Accession Number _____.

1 10. The polypeptide of claim 8 further comprising
2 heterologous amino acid sequences.

1 11. An antibody which selectively binds to a
2 polypeptide of claim 8.

1 12. A method for producing a polypeptide selected from
2 the group consisting of:

3 a) a polypeptide comprising the amino acid sequence
4 of SEQ ID NO:8 or an amino acid sequence encoded by the cDNA
5 insert of the plasmid deposited with ATCC as Accession
6 Number _____;

7 b) a polypeptide comprising the amino acid sequence
8 of SEQ ID NO:26 or an amino acid sequence encoded by the
9 cDNA insert of the plasmid deposited with ATCC as Accession
10 Number _____;

11 c) a fragment of a polypeptide comprising the amino
12 acid sequence of SEQ ID NO:8 or an amino acid sequence
13 encoded by the cDNA insert of the plasmid deposited with
14 ATCC as Accession Number _____, wherein the fragment
15 comprises at least 15 contiguous amino acids of SEQ ID NO:8
16 or an amino acid sequence encoded by the cDNA insert of the
17 plasmid deposited with ATCC as Accession Number _____;

18 d) a fragment of a polypeptide comprising the amino
19 acid sequence of SEQ ID NO:26 or an amino acid sequence
20 encoded by the cDNA insert of the plasmid deposited with
21 ATCC as Accession Number _____, wherein the fragment
22 comprises at least 15 contiguous amino acids of SEQ ID NO:26
23 or an amino acid sequence encoded by the cDNA insert of the
24 plasmid deposited with ATCC as Accession Number _____;

25 e) a naturally occurring allelic variant of a
26 polypeptide comprising the amino acid sequence of SEQ ID
27 NO:8 or an amino acid sequence encoded by the cDNA insert of
28 the plasmid deposited with ATCC as Accession Number

29 __, wherein the polypeptide is encoded by a nucleic acid
30 molecule which hybridizes to a nucleic acid molecule
31 comprising SEQ ID NO:7 or SEQ ID NO:9 under stringent
32 conditions;
33 f) a naturally occurring allelic variant of a
34 polypeptide comprising the amino acid sequence of SEQ ID
35 NO:26 or an amino acid sequence encoded by the cDNA insert
36 of the plasmid deposited with ATCC as Accession Number
37 _____, wherein the polypeptide is encoded by a nucleic acid
38 molecule which hybridizes to a nucleic acid molecule
39 comprising SEQ ID NO:25 or SEQ ID NO:27 under stringent
40 conditions;
41 comprising culturing the host cell of claim 5 under
42 conditions in which the nucleic acid molecule is expressed.

1 13. The isolated polypeptide of claim 8 comprising the
2 amino acid sequence of SEQ ID NO:8 or SEQ ID NO:26 or an
3 amino acid sequence encoded by the cDNA insert of the
4 plasmid deposited with ATCC as Accession Number
5 ,or an amino acid sequence encoded by the cDNA insert of the
6 plasmid deposited with ATCC as Accession Number _____.

1 14. A method for detecting the presence of a
2 polypeptide of claim 8 in a sample, comprising:
3 a) contacting the sample with a compound which
4 selectively binds to a polypeptide of claim 8; and
5 b) determining whether the compound binds to the
6 polypeptide of claim 8 in the sample.

1 15. The method of claim 14, wherein the compound which
2 binds to the polypeptide is an antibody.

1 16. A kit comprising a compound which selectively
2 binds to a polypeptide of claim 8 and instructions for use.

1 17. A method for detecting the presence of a nucleic
2 acid molecule of claim 1 in a sample, comprising the steps
3 of:

4 a) contacting the sample with a nucleic acid probe or
5 primer which selectively hybridizes to the nucleic acid
6 molecule; and

7 b) determining whether the nucleic acid probe or
8 primer binds to a nucleic acid molecule in the sample.

1 18. The method of claim 17, wherein the sample
2 comprises mRNA molecules and is contacted with a nucleic
3 acid probe.

1 19. A kit comprising a compound which selectively
2 hybridizes to a nucleic acid molecule of claim 1 and
3 instructions for use.

1 20. A method for identifying a compound which binds to
2 a polypeptide of claim 8 comprising the steps of:

3 a) contacting a polypeptide, or a cell expressing a
4 polypeptide of claim 8 with a test compound; and

5 b) determining whether the polypeptide binds to the
6 test compound.

1 21. The method of claim 20, wherein the binding of the
2 test compound to the polypeptide is detected by a method
3 selected from the group consisting of:

4 a) detection of binding by direct detecting of test
5 compound/polypeptide binding;

6 b) detection of binding using a competition binding
7 assay;

8 c) detection of binding using an assay for CARD-4L or
9 CARD-4S mediated signal transduction.

1 22. A method for modulating the activity of a
2 polypeptide of claim 8 comprising contacting a polypeptide
3 or a cell expressing a polypeptide of claim 8 with a
4 compound which binds to the polypeptide in a sufficient
5 concentration to modulate the activity of the polypeptide.

1 23. A method for identifying a compound which
2 modulates the activity of a polypeptide of claim 8,
3 comprising:
4 a) contacting a polypeptide of claim 8 with a test
5 compound; and
6 b) determining the effect of the test compound on the
7 activity of the polypeptide to thereby identify a compound
8 which modulates the activity of the polypeptide.
9